DRAFT
Quinn/Spear
Meeting Notes
4/2/99
9:30-11:30 AM

Attendees:

Agenda:
i. **EWA** Gaming Progress and Schedule

Highlights
We discussed gaming and assumed tools. Agreed that there is a benefit to gaming first with a full array of tools so that you determine which tools are most effective, then try to game in real time starting with few tools and bringing others on line as quickly as possible during the game. Agreed to analyze results of last week's game first, then get to new game 1 for late Stage 1 conditions. Finish that as soon as possible and get to game starting with 2001 conditions. Feed any new concepts into draft EIS process so that ideas are covered. This process should provide key concepts for preferred alternative. Get as much done as possible for May EIS deadline, but continue process thereafter through final EIS. Agreed that such strong analytical tools as the daily model simulation greatly facilitate process and agreement among parties.

A. EWA process - Bruce Herbold
1. Difficulty in using Kern Water Bank for EWA.
C: Suggestion by T. Quinn to dig some wells to provide capacity as needed for EWA purposes.
2. Bacon Island connection to CCF for EWA. C: concern about water quality problems using Bacon.
3. Priority of EWA water in San Luis. C: why lowest priority? R: We have ground water and Bacon storage to move EWA water to if the need arises or when San Luis storage is close to filling.
4. C: alternatives to Bacon EWA storage - does not have to be in Delta where there are water quality problems. R: Bacon storage has other advantages that SOD does not.

5. C: Did not use much of money available for EWA. R: could buy more water early in Stage 1. We also would apply more money to pumping costs and loss of power generation - we did not have time or ability to track such costs in the gaming

process.

6. C: Water supply benefits? R: we did not keep track of water supply benefits in this gaming process.

B. Operational Insights - Dave Fullerton

7. **Shasta Storage:**
   - **a.** We took first 145 TAF of Shasta storage upon its filling as EWA portion of enlarged Shasta.
   - b. We backed up some EWA water into Shasta when opportunity arose.
   - c. Raising Shasta level provided additional benefits including larger cold water pool.
   - d. We could also use Shasta as a source to borrow from.

8. **Delta Islands**
   - **a.** Screening on island intake an advantage in Stage 1. It provided an alternative intake point.
   - b. We used Delta Wetland rules though somewhat constraining for our purposes.
   - c. C: how important was second intake location? R: It allowed us to avoid salvage. Works like South Stub concept.
   - d. **C:** MacDonald Tract was looked at closely last year by NoName. Island storage offers several advantages: no pumping from dead-end location; it would have sweeping velocities past screens.
   - e. Issue: Will fish screened out at Bacon intake simply wind up at south Delta pumps?

9. **E/I Relaxations**
   - **a.** Provides greatest EWA benefit in dry years.

10. **San Luis Storage**
    - **a.** Has high input-output capacity advantage.
    - b. Good place to hold assets or from where to borrow assets.

11. **Ground Water**
    - **a.** Not as useful as hoped. Only gained 150TAF over 5 years. Output capacity limited. Inputs were not a bid problem.
    - **b.** **C:** Why not buy more pumps to increase capacity.
    - c. C: Locals may push panic button on this one.

12. **Water Purchases**
    - a. Need more realistic pricing.
    - b. Would be more useful in dry years.

13. **Synergies**
    - **a.** We found that using resources in concert was more beneficial.
    - b. We were able to erase some debts.

c. C: Did you ever lose water as San Luis filled and overflowed? R: No.

14. **Adequacy of the EWA.**
    a. Problems in middle or average years with greatest risk to account in early summer.

15. **Uncertainty**
    a. Biological consequences
    b. Cumulative impacts

Recommendations - Ron Ott

- Next week focus on analysis of recent gaming exercise.
- Second week focus on setting up model tools for third week's effort.
- Third week - new gaming.
- Future gaming would include water supply, water quality and biological effects.

Ground Rules

- Biologist must be satisfied that scenario provides protection.
- Veto process.

Q: What are the objectives of these rules? R: We hoped to get closer to agreement at the end. We hoped to have all sides nodding agreement or provide a clear opinion as to why there was no agreement.

Q: Are the ground rules too tightly constrained? R: Model does water supply effects. It has common currency of water and money.

C: Model rules should be operated within water rights constraints.

Q: Do we want to improve water supply? R: We do need some water supply assets. We have to know implications on water supply and water quality to fine tune process.

General Comments

C: Benefits of EWA go well beyond the original objectives.
C: This game was fine, but we have to conduct a real game for 2001 to develop what it will take to have ESA assurances. Biological opinions will assume 2000, 2001, but will cover at least seven years, so allows for testing tools as they come online. You jumped into year 1 with a lot of non-existing assets. What would we do if we started next year without this array of assets? This game does not give us help in addressing this question.
R: We tried to show where we were going to be at end of Stage 1 and how effective various tools were going to be.
Q: What do we want outcome of Stage 1 to be? How will we transition to Stage 2?

C: For April 15 we should continue to test general concepts and options via analysis of an end of Stage 1 alternative in order to test available tools.
C: Endorses 3-D approach - WS, WQ, and Fish, but need to determine response if one is scaled down.
C: If anyone sees a better asset they should speak up.
C: Like Delta island tool, but would like to see analysis of alternatives.
C: Enviro's are concerned about enlarging Shasta, but we like how the tool works. Will suggest an alternative for this function.
C: Sharing formula for benefits of new facilities: JPOD and ISDP benefits to water supply.
R: we still use assets for EWA. Assets provide a convenient place to park water.
C: We should evaluate the best sequence for bringing tools on line through Stage 1.
C: This sequence of tools will be the basis of a preferred alternative. It should be similar to what is proposed in May draft. This group is where the preferred alternative will come together. Need to work out a sequence that will provide the necessary assurances. We won't sign an ROD if the assurances aren't there.
Q: Does the draft in May or the final later in the year have to have specificity on approach? R: Features we discuss here should be in draft EIS.
C: It is impossible to get away from the issue of the baseline conditions.
Q: What can we do to make this work.
Q: How do we address concerns such as raising Shasta?
Q: Can we try a credit card approach as opposed to the above approach?
C: Suggest gaming sequence from 2001 to 2007 would be harder then working back from 2007 conditions. R: Go ahead with full compliment approach from 2007 but then come back immediately to what we would do next year. By mid May design rules for the real game. Design a third game for getting through Stage 1 including different concepts. But be able to answer key question - have we covered key pieces and tools in the EIS? Quinn-Spear group can't dictate the rules for you in the next round. Do your game 1 with full set of assets to evaluate their utility, but move to game 2 - the real game - as quickly as possible. Outcomes may not meet everyones needs, but should be balanced 3-D (wq, ws, and fish) approach.

Q: Can we change mix of assets and preserve benefits? What assets can we really count on for Stage 1? What can we do to make sure we look at all the options in the next round?
C: We should look at all alternative ways to perform function of proposed tools. We all want to test the options to see how they perform - pros and cons.
C: We have tried two approaches; we are now ready to try others.

C: CALFED failed to deal with the overall water management issues. You should look into the contract approach as well as credit card approach. Analyze and get pros and cons. We may have a mixed approach preferred alternative.

C: Cooperative approach seems to work with strong analytical tools.

Assignment:

- Game 1: end of stage 1 tools available.
- Game 2: Day 1 start at beginning of Stage 1.
- Try contract and credit approach.
- Need not agree, but should understand nature of disagreements.
- Presentation to CALFED Policy Group on April 15.
- Presentation to Small Group
- Next meeting of this group 2pm on April 28th. Followed by another meeting at 3:30 on May 12th.